

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A steel tube for reinforcing a automobile door, having a composition comprising:

0.05 to [[0.30]] 0.22 mass % of C;

0.01 to 2.0 mass % of Si;

[[1.8]] 2.5 to [[4.0]] 3.5 mass % of Mn;

0.005 to 0.10 mass % of Al; and

the remainder as Fe and unavoidable impurities,

wherein the steel tube has tensile strength of no less than 1000 MPa and no more than 1400 MPa and is excellent in three-point-bending property.

2. (original) A steel tube for reinforcing a automobile door according to claim 1, wherein the steel tube has a structure which is constituted of martensite and/or bainite, and the martensite and/or bainite is a transformation product obtained as a result of transformation of a deformed austenite.

3. (original) A steel tube for reinforcing a automobile door according to claim 1, wherein the steel tube has a structure which is a mixture of martensite and/or bainite and ferrite, and

the martensite and/or bainite is a transformation product obtained as a result of transformation of a deformed austenite.

4. (original) A steel tube for reinforcing a automobile door according to claim 3, wherein the content of ferrite, expressed as the area ratio, is no more than 20 %.

5. (previously presented) A steel tube for reinforcing a automobile door according to claim 1, wherein the yield ratio of the steel tube is no larger than 80 %.

6. (currently amended) A steel tube for reinforcing a automobile door of any according to claim 1, wherein the steel tube has at least one composition selected from the group consisting of composition A, composition B and composition C described below, in addition to the aforementioned composition[[.]]:

Composition A: at least one type of element selected from the group consisting of: no more than 1 mass % of Cu; no more than 1 mass % of Ni; from 0 mass % to no more than [[2]] 0.5 mass % of Cr; and no more than 1 mass % of Mo.

Composition B: at least one type of element selected from the group consisting of: no more than 0.1 mass % of Nb; no more than 0.5 mass % of V; no more than 0.2 mass % of Ti; and no more than 0.003 mass % of B.

Composition C: at least one selected from the group consisting of: no more than 0.02 mass % of REM; and no more than 0.01 mass % of Ca.

7. (currently amended) A method of producing a steel tube for reinforcing a automobile door, comprising the steps of:

preparing a mother steel tube having a composition which includes: 0.05 to [[0.30]] 0.22 mass % of C; 0.01 to 2.0 mass % of Si; [[1.8]] 2.5 to [[4.0]] 3.5 mass % of Mn; 0.005 to 0.10 mass % of Al; and the remainder as Fe and unavoidable impurities;

subjecting the mother steel tube to a heating or soaking treatment; and

thereafter, subjecting the mother steel tube to a diameter-reducing rolling process in which the total diameter-reduction rate is no less than 20 % and the temperature at which the diameter-reducing rolling process is finished is no higher than 800 °C to provide a finished steel tube with a tensile strength of
at least 1000 MPa and no more than 1400 MPa.

8. (currently amended) A method of producing a steel tube for reinforcing a automobile door according to claim 7, wherein the steel tube has at least one composition selected from the group consisting of composition A, composition B and

composition C described below, in addition to the aforementioned composition[[.]]:

Composition A: at least one type of element selected from the group consisting of: no more than 1 mass % of Cu; no more than 1 mass % of Ni; from 0 mass % to no more than [[2]] 0.5 mass % of Cr; and no more than 1 mass % of Mo.

Composition B: at least one type of element selected from the group consisting of: no more than 0.1 mass % of Nb; 0.5 mass % of V; no more than 0.2 mass % of Ti; and no more than 0.003 mass % of B.

Composition C: at least one selected from the group consisting of: no more than 0.02 mass % of REM; and 0.01 mass % of Ca.